Contribution ID: **31** Type: **Oral**

# Low Background kTon-Scale Liquid Argon Time Projection Chambers

*Wednesday, May 11, 2022 5:10 PM (20 minutes)*

We find that it is possible to increase sensitivity to MeV or lower-energy physics in a third or fourth DUNE-like module with careful controls over radiopurity and some modifications to a detector similar to the DUNE Far Detector design. In particular, sensitivity to supernovae and solar neutrinos can be enhanced with these changes and an improved photon detection system. A neutrino-less double beta decay search with $^{136}$Xe loading appears feasible. Furthermore, sensitivity to Weakly Interacting Massive Particle (WIMP) Dark Matter (DM) becomes competitive with the planned world program in such a detector, and potentially offers a unique seasonal variation detection that is characteristic for the nature of WIMPs.

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**Session Classification:** DUNE Module of Opportunity - Parallel

**Track Classification:** DUNE Module of Opportunity